

REMARKS

The Official Communication of November 18, 2003 indicated that the Amendment and Reply filed on July 17, 2003 was not fully responsive because it did not contain a proper marked-up version of the amendment beginning on page 20, line 7 of the specification. The foregoing amendment includes all of the previously requested amendments and remarks submitted in the July 17, 2003 Amendment and Reply, except for the correction to the marked-up version of the amendment to the paragraph beginning on page 20, line 7 of the specification.¹ Thus, entry of the foregoing, reexamination and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested.

By the foregoing amendment, the specification has been amended in numerous locations as discussed *infra*. Support for the amendments to the specification can be found throughout the originally filed application. Additionally, original claims 1-10 have been canceled without prejudice or disclaimer to the subject matter recited therein and new claims 11-20 have been added. New claims 11-19 correspond essentially to original claims 1-9. In addition to the language recited in original claims 1, the term "detecting" in step

¹ Applicants have not resubmitted a copy of the following items which were enclosed with the Amendment and Reply filed on June 17, 2003: a copy of the Information Disclosure Statement filed September 9, 2002, an Information Disclosure Statement Transmittal Letter, an Information Disclosure Statement, a PTO Form 1449 citing one reference and a copending application, and a Request for Approval of Drawing Changes with 9 sheets of drawings marked in red. Rather, the Examiner is respectfully requested to enter and utilize the above-listed documents which were originally submitted on June 17, 2003.

(d) has been replaced with the phrase "determining the existence or absence of . . ." and step (e) has been included. Support for this language can be found on at least page 27, line 33 to page 28, line 5 of the specification. In addition to the language recited in original claim 9, claim 19 further recite step (c). Support for step (c) in claim 19 can be found, for example, in original claim 10 and on page 28, lines 34-36 of the specification. New claim 20 depends on claim 19. Support for new claim 20 can be found on at least page 25, lines 13-15 of the Specification.

With the Official Action mailed on December 20, 2002, the Examiner attached an initialed copy of the PTO-1449 Form submitted with the Information Disclosure Statement filed on September 9, 2002. However, in the Information Disclosure Statement filed on September 9, 2002, applicants cited more than the foreign document listed on the PTO-1449 Form. More specifically, on page 2 of the Information Disclosure Statement filed on September 9, 2002, applicants also directed the Examiner's attention to co-pending Application Serial No. 09/549,949.² Despite applicants' request, an initialed copy of the second page of the Information Disclosure Statement citing the co-pending application was not returned to applicants. Accordingly, applicants once again request that the Examiner initial the box on the second page of the Information Disclosure Statement and return a copy to applicants. For the Examiner's convenience, a copy of the September 9, 2002 Information Disclosure Statement is attached hereto.

² A copy of such co-pending application was also submitted.

Additionally, with regard to co-pending Application Serial No. 09/549,949, the Examiner's attention is directed to the fact that such application has recently issued as U.S. Patent No. 6,541,226. Hence, an information disclosure statement, and corresponding PTO-1449 Form, listing this issued patent is attached hereto.

On page 2 of the Official Action the Examiner alleges that the specification contains "some unclear, inexact or verbose terms" Applicants disagree with the Examiner's statements in this regard. However, to advance prosecution, and not to acquiesce to the Examiner's allegations, applicants have amended the specification throughout pursuant to the Examiner's comments. Such amendments are not intended to limit any aspect of the disclosed invention. Moreover, no new matter has been added. The amendments to the specification in this regard are self-explanatory. It is noted with particularity, however, that the description of gel lanes in Figures 4, 6, 9, 10, 12 and 13 have been amended to clarify that the particular oligonucleotide or heat treatment was used. As indicated by the Examiner, "it is clear from the description of the experiments further in the specification that they were used." It is also particularly noted that the brief description of the drawings have been amended so as to contain separate designations for the figures designated as A, B, C, etc. With regard to the description for Figure 10C, support for such amendment can be found on at least page 17, lines 27-29 and page 36, lines 11-12 of the specification. Moreover, in accordance with the amendments to the brief description of the drawings, included herewith is a Request for Approval of Drawing Changes regarding Figures 1, 2, 3, 4, 6, 9, 10, 12 and 13.

Claims 1-9 have been objected to for ending in a comma as opposed to a period.

Claims 1-9 have been canceled by the foregoing amendment. Thus, this rejection is rendered moot. It is noted that the newly added claims all end with a period.

Accordingly, withdrawal of the objection to the claims is respectfully requested.

Claims 1-8 and 10 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for purportedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-8 and 10 have been canceled by the foregoing amendment. Thus, this rejection is rendered moot.

To the extent that rejection under 35 U.S.C. § 112, second paragraph, may apply to the newly added claims, applicants respectfully traverse the rejection. As described above, step (d) of claim 11 recites "determining the existence or absence of an oligonucleotide probe . . ." and step (e) involves judging whether or not SNP exists in the DNA region complimentary to the oligonucleotide probe in the target double strand DNA. Moreover, none of the claims recited the language objected to with regard to original claim 10.

In view of the above, the Examiner is respectfully requested to withdraw the rejection under 35 U.S.C. § 112, second paragraph.

Claims 9 and 10 have been rejected under 35 U.S.C. §§ 102(a) & (e) as purportedly being anticipated by U.S. Patent No. 6,200,812 B1 issued to Pati et al. Claims 9 and 10 have also been rejected under 35 U.S.C. § 102(b) as purportedly being anticipated by U.S. Patent No. 6,074,853 issued to Pati et al. Further, claims 9 and 10 have been rejected

under 35 U.S.C. § 102(e) as purportedly being anticipated by U.S. Patent No. 6,335,164 B1 issued to Kigawa et al. Each of these rejections are respectfully traversed.

Claims 9 and 10 have been canceled by the foregoing amendment. Thus, this rejection is rendered moot. However, to the extent that the Examiner may consider these rejections to apply to the currently pending claims, applicants traverse each of these rejections for at least the following reasons.

The Federal Circuit has held that for prior art to be anticipatory, every element of the claimed invention must be disclosed in a single item of prior art in the form literally defined in the claim. *See, e.g., Hybritech, Inc. v Monoclonal Antibodies, Inc.*, 213 U.S.P.Q. 81, 90 (Fed. Cir. 1986). This requirement for anticipation has clearly not been met with respect to the currently pending claims of the present application.

The Examiner has indicated that the '812 Pati et al. patent and the '853 Pati et al. patent disclose a kit including DNA probes, recombinases, buffers, and ATP. With regard to the '164 Kigawa et al. patent, the Examiner has indicated that such patent discloses a kit comprising a Rec A-like recombinase, appropriate co-factors, a heterologous and homologous probes, and a washing solution.

Currently pending claims 19 and 20, which are directed to a kit, recite that the kit comprises "a reagent removing the homologous recombinant protein." None of the patents cited by the Examiner — the '812 Pati et al. patent, the '853 Pati et al. patent, and the '164 Kigawa et al. patent — include such a reagent. Accordingly, none of the cited patents disclose each and every element of the claimed invention.

In light of the above, the Examiner is respectfully requested to withdraw each of the rejections under 35 U.S.C. § 102.

Finally, the Examiner has provisionally rejected claims 9 and 10 under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claim 9 of co-pending Application Serial No. 09/549,949. This rejection is respectfully traversed.

Claims 9 and 10 have been canceled by the foregoing amendment. Thus, this rejection is rendered moot. However, to the extent that the Examiner may consider these rejections to apply to the currently pending claims, applicants traverse each of these rejections for at least the following reasons.

The analysis employed in an obviousness-type double patenting rejection parallels the guidelines for a 35 U.S.C. § 103 obviousness determination. *See* M.P.E.P. § 804.

As mentioned *supra*, co-pending Application Serial No. 09/549,949 has recently issued as U.S. Patent No. 6,541,226. Neither claim 9 of co-pending Application Serial No. 09/549,949, nor any of the claims in the '226 patent, render obvious the kit claims — claims 19 and 20 — of the present application. As discussed *supra*, claims 19 and 20 recite that the kit comprises "a reagent removing the homologous recombinant protein." However, claim 9 of co-pending Application Serial No. 09/549,949, or any one of the claims in the '226 patent, fails to teach or suggest the inclusion of such a reagent in the kit. Accordingly, claims 19 and 20 are not rendered obvious by claim 9 of co-pending Application Serial No. 09/549,949, or any one of the claims in the '226 patent.

In light of the above, the Examiner is respectfully requested to withdraw the obviousness-type double patenting rejection.

From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

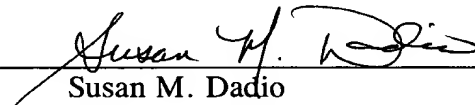
In the event that there are any questions relating to this Amendment and Reply, or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

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Date: December 22, 2003

By: _____



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